Remarks

Favorable reconsideration is respectfully requested in light of the above amendments and the following comments. The specification has been amended to correct minor typographical errors that were inadvertently introduced in the previous amendment. No new matter has been added as a result of these amendments. New claim 27 has been added, representing objected-to claim 13 rewritten in independent form. Claim 12-13 have been canceled and claim 14 has been appropriately amended. No new matter has been added as a result of these amendments.

Applicants respectfully traverse the Examiner's rejection of claims 9-12, 14, 17-19 and 21 under 35 USC § 103(a) as unpatentable over Salmon et al., U.S. Patent No. 5,458,585 (hereinafter Salmon). The Examiner has acknowledged that Salmon does not describe the claimed step of causing the solder to flow around the shaft, but has asserted that this is obvious. Applicants submit that the Examiner is incorrect.

In particular, Salmon does not appear to describe or suggest positioning a solder ball at the distal end of a shaft, with a coil disposed along the length of the shaft. Instead, Salmon appears to describe a coil that extends distally beyond a shaft. See for example Figure 2, which illustrates a solder ball 65 positioned at the very distal end of a wire coil 55 which is itself attached to the distal tip 60 of the work element 20. Thus, in this embodiment Salmon does not appear to describe or suggest the presence of an elongate shaft around which molten solder could flow in order to secure together the elongate shaft, the coil and the so-formed atraumatic tip.

With respect to Figures 3A-4B, as cited by the Examiner, it appears that these Figures show a solder ball 65 being positioned proximate to and subsequently melted into the distal

end 70 of the wire coil 55 while the wire coil 55 remains on a holder 110. It would appear that the wire coil 55, with solder tip now formed, is subsequently welded to the work element 20. Again, Salmon does not appear to describe or suggest the presence of an elongate shaft around which molten solder could flow in order to secure together the elongate shaft, the coil and the so-formed atraumatic tip.

Therefore, Salmon does not describe or suggest a process in which a solder ball is at least partially melted into a coil that is disposed along an elongate shaft in a manner by which at least part of the molten solder would flow around the elongate shaft. Salmon does not describe or suggest the spatial relationship between elongate shaft and coil that is required by the claimed limitation concerning solder flowing into the coil and around the elongate shaft. Thus, Salmon cannot be considered as teaching the claimed invention and the rejection should therefore be withdrawn.

Applicants respectfully traverse the Examiner's rejection of claims 15 and 22 under 35 USC § 103(a) as unpatentable over Salmon, in view of Frechette et al., U.S. Patent No. 5,830,155 (hereinafter Frechette). Salmon is distinguished as above as failing to describe or suggest the claimed invention. Frechette is relied upon to suggest the inclusion of a heat shrink tube attached to the elongate shaft. However, Frechette fails to remedy the noted shortcomings of Salmon (with respect to independent claims 1 and 17) and thus claims 15 and 22 are similarly patentable. Therefore, the rejection should be withdrawn.

In view of the amendments and comments presented herein, favorable reconsideration in the form of a Notice of Allowance is respectfully requested. If a teleconference is deemed useful, the undersigned attorney may be contacted at the telephone number provided below.

Respectfully submitted,

TODD D. EUNGARD ET AL.

By their attorney,

Date: 100. 6, 2003

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